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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/335,608	06/18/1999	TIMOTHY J. MOULSLEY	PHB-34-257	6666	
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/335,608	MOULSLEY, TIMOTHY J.			
Office Action Summary	Examiner $\mathcal{H}^{$	Art Unit			
	Nhat Do	2663			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply by within the statutory minimum of thirty (30) will apply and will expire SIX (6) MONTHS to cause the application to become ABANDO	to e timely filed I days will be considered timely. Ifrom the mailing date of this communication. ONED (35 U.S.C. § 133).			
1) Responsive to communication(s) filed on 15 Se	eptember 2003.				
2a) ☐ This action is FINAL . 2b) ☑ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
 4) ☐ Claim(s) 1,2,4-7 and 9-20 is/are pending in the 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1,2,4-7 and 9-20 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or 	wn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) cobjected to by the drawing(s) be held in abeyance. ion is required if the drawing(s) is	See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. §§ 119 and 120					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list 13) Acknowledgment is made of a claim for domestic since a specific reference was included in the firs 37 CFR 1.78. a) The translation of the foreign language pro 14) Acknowledgment is made of a claim for domestic since a specific reference was included in the firs 37 CFR 1.78.	s have been received. s have been received in Applicative documents have been received in Applicative documents have been received. (PCT Rule 17.2(a)). of the certified copies not receive priority under 35 U.S.C. § 11 st sentence of the specification positional application has been copriority under 35 U.S.C. §§ 1	cation No eived in this National Stage eived. 19(e) (to a provisional application) n or in an Application Data Sheet. received. 120 and/or 121 since a specific			
reference was included in the first sentence of th	e specification or in an Applica	ation Data Sheet. 37 CFR 1.78.			
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Inform	nary (PTO-413) Paper No(s) nal Patent Application (PTO-152)			

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DETAILED ACTION

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 4, 6, and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 is indefinite because the claim depends on claim 3, which has been cancelled.

Claim 6 is indefinite because the claim depends on claim 3, which has been cancelled.

Claim 9 is indefinite because the claim depends on claim 8, which has been cancelled.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. <u>Claims 12, 13, 16, 17</u> are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,393,000 to Feldman.

Regarding to claim 12, Feldman discloses a method comprising:

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Allocating a first, second, and third types of data to a single output data stream (when the principle signal is absent, transmitting data through the same communication channel (abstract). The first type of data is video/real-time data (image data ((Col. 7, lines 26-32), the third type of data is non-real time packet data (e-mail data (Col. 4, lines 53-56)). The third type of data is added when the data rate of the first/second type of data is less than an expected capacity of a transmission channel (send data when voice is silent (Fig. 4, steps 104, 106, and 108);

Transmitting the single data stream on a single stream, multiple-mode channel (transmitting different data (principle and e-mail data) in a single channel).

Regarding to claim 13, Feldman discloses the first type of data is video (image data), and second data is voice (Col. 7, lines 26-33)).

Regarding to claim 16, Feldman discloses:

Accumulating non-real-time packet data (data is hold until the voice is silent (Fig. 4, steps 104, 106, and 108);

Allocating real-time data to an output data stream (sending voice (Fig. 4, step 106));

Determining when the real-time data does not require the full capacity of a transmission channel (determining whether voice is silent or not (Fig. 4, lines 104));

Allocating the non-real-time data to the output stream when the real-time data does not require the full capacity (send data when voice is silent (Fig. 4, step 106));

Allocating output data stream to a channel that occupies more than one slot in a transmission frame (data may occupy more than one time slot in the same TDMA time frame (Col. 7, lines 23-25));

Regarding to claim 17, the claim recites the rejected limitation of claim 16 which are:

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Accumulating non-real-time packet data;

Variably allocating real-time data and non real time data to multiple time segments within a time frame when the real-time data does not requires the full capacity of the transmission channel; and

Transmitting the time frame.

5. <u>Claim 14</u> is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,504,773 to Padovani et al.

Padovani et al disclose a method comprising:

Combining data of two types into a single output data stream (the generator 20 generates data stream from receiving primary and secondary data from the processor 18 (Col. 4, lines 43-58). The two types of data comprise variable rate real-time data (Col. 4, lines 23-42), the non-real-time data is added to the output data rate when an expected capacity of a transmission channel is greater than the data rate if the real-time data (Col. 8, lines 14-46);

Encoding the combined data using a single spreading code, so that the combined data occupies a single transmission channel (encoding the data stream receives from the generator 20 by a spreading code by the encoder 22 (Col. 8, lines 47-60));

Transmitting the encoded data on a single transmission channel (Col. 14, lines 1-7).

6. <u>Claims 18-20</u> are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 5,818,871 to Blakeney, II et al.

Regarding to claim 18, Blakeney, II et al disclose a method comprising:

Allocating first and second types of data to a single output data stream (maintaining a link for primary and secondary data (Col. 11, lines 10-15). The first type of data is real-time data

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(the primary data is provided from the variable rate vocoder (Col. 11, lines 34-37), and the second type of data is non-real-time data (the secondary data is facsimile (Col. 11, lines 10-15; lines 60-65). The second type of data is added when the data rate of the first type of data is less than an expected capacity of a transmission channel (when the primary traffic is less than a predetermined maximum data rate, the excess capacity is used to transmit secondary data (Col. 11, lines 27-35));

Transmitting the single output data stream on a single multiple mode channel (transmitting data in different format (Fig. 3));

Transmitting information regarding how the first and second types of data have been allocated to the output data stream on a second, control channel (the frame format field tells the receiving device which frame format being used (Col. 11, lines 1-18);

Regarding to claims 19, and 20, further to the rejection of claim 19, Blakeney, II et al disclose: placing information regarding timing of the first and second types of data in predetermined indication portion of the output data stream (transmitting indication of whether to accept or reject the requested service configuration to the mobile station in a page message, which is transmitted in a control channel (Col. 9, lines 7-23; col. 4, lines 34-43).

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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8. <u>Claims 1, 2, 4-7, and 9-11</u> are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,477,176 to Hamalainen et al in view of to Blakeney, II et al.

Regarding to claims 1, 6, and 7, Hamalainen et al disclose a system comprising:

A first station (the MS 32) and a second station (the BTS 33) (Fig. 8a);

A dual mode channel 31 for communication real-time and non-real time packet data (Fig. 8a; abstract, lines 1-4);

The first station (the MS 32) comprises a transceiver 11 (Fig. 1) for transmitting both real-time and non-real-time data;

Since Hamalainen et al disclose the second station (the BTS 33) has a corresponding structure as the first station (the MS 32) (Col. 3, lines 21-23), it is inherent that the second station (the BTS 33) also comprises a transceiver for transmitting both real-time and non-real-time data;

The controller 10 controls the output of real-time data and non-real-time data (Col. 3, lines 32-34; lines 57-63);

Speech coding system (Comprising elements 3, 4, and 5) prepares speech data from speech input 1 (Col. 3, lines 29-32);

The controller 10 receives timing information from the element 4 indicating interruptions of the speech data (Col. 3, lines 45, 46; lines 57-63).

Hamalainen et al fail to disclose the controller 10 controls the output of non-real-time data when data rate of real-time data is less than the full data capacity of the channel. Blakeney, II et al disclose a similar system comprising a controller (comprising a microprocessor, the service negotiator 40, and the multiplexer 48) for controlling the output of non-real-time data when data rate of real-time data is less than the full data capacity of the channel (Col. 11, lines

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29-51). It would have been obvious to a person of ordinary skill in the art by the time the invention was made to modify the Hamalainen et al controller 10 so that it outputs non-real-time data when data rate of real-time data is less than the full data capacity of the channel as the controller taught by Blakeney, II et al. A skilled artisan would have been motivated to so in order to employ the full capacity of the system.

<u>Regarding to claim 2</u>, Hamalainen et al disclose the real-time data is speech data (Fig. 1).

Regarding to claims 4, and 9, Hamalainen et al disclose a buffer 9 for storing non-real-time data for transmission when there is no real-time data to transmit (Col. 3, lines 61-63).

Regarding to claim 5, Hamalainen et al disclose the first station is a MS and the second station is a BTS. However, Hamalainen et al also disclose BS and the BTS have corresponding function and structure (Col. 3, lines 15-23). Therefore, the first and second stations are interchangeable.

Regarding to claims 10, and 11, Hamalainen et al disclose real-time data and non-real-time data are transmitted in one channel (Fig. 7).

9. <u>Claim 15</u> is rejected under 35 U.S.C. 103(a) as being unpatentable over Blakeney, II et al. Blakeney, II et al disclose a method comprising:

Transmitting a combined data stream from a transmission channel (transmitting the primary and secondary data simultaneously (Fig. 3d; col. 11, lines 20-23), it is inherent that the receiving side receives the combined data stream from a transmission channel;

Demodulating the data stream (Col. 10, lines 39-43);

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Reading the frame header to determine which frames contain packet data and which frames contain speech data (the frame format field tells the receiving device which frame format being used (Col. 11, lines 1-18);

Blakeney, II et al fail to disclose explicitly reconstructing speech and packet data; providing the speech data to a speech decoder; and providing a speech output signal and a packet data output signal at distinct output devices.

However, Blakeney, II et al disclose: constituting the speech and packet data (facsimile data) from the distinct devices (fax, modem, and vocoder (Fig. 2; col. 11, lines 5-15)).

Furthermore, Blakeney, II et al also disclose the traffic is forward and reverse direction between the base station and the mobile station (Col. 4, lines 44-54).

Therefore, it would have been obvious to a person having ordinary skill in the art by the time the invention was made to modify the method of Blakeney, II et al so that it reconstitutes speech and packet data; provides the speech data to a speech decoder; and provides a speech output signal and a packet data output signal at distinct output devices in order to process mixed data receives from the base station properly.

Response to Arguments

10. Applicant's arguments with respect to (old) claims 3, and 8 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhat Do whose telephone number is (703) 305-5743. The examiner can normally be reached on 8:30 AM - 5:30 PM Monday - Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-6743 for regular communications and 703-308-6743 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Nhat Do Examiner Art Unit 2663

ND

November 26, 2003

MELVIN MARCELO PRIMARY EXAMINED